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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,258	04/21/2004	Ho-jeong You	Q78878	4843
23373	7590	10/31/2007	EXAMINER	
SUGHRUE MION, PLLC			HA, DAC V	
2100 PENNSYLVANIA AVENUE, N.W.				
SUITE 800			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20037			2611	
			MAIL DATE	DELIVERY MODE
			10/31/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/828,258

Applicant(s)

YOU ET AL.

Examiner

Dac V. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 9-14, 27-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 24 are objected to because of the following informalities:

Claim 24, line 1, "UWB" should be spelled out at first mentioned. Similar issue exists in claims 1, 30.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 24-26, 30-32, 1-8, 15-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheah (US 7,286,599).

**Re. Claim 24**, Cheah suggests the teaching of the claimed subject matter "detecting power intensity of a radio receive signal according to on/off states of at least one communication module with a limited working band; controlling the on/off states of the at least one communication in accordance with the detection result; and filtering out the radio receive signal in the band" in Fig. 3; col. 2, line 48 to col. 3, line 32; col. 8, line 61 to col. 9, line 29, as follows. Cheah discloses receiving UWB signal using a filter banks (Fig. 3, element 36). Even though Cheah does not disclose controlling the

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selection of the filter as claimed (i.e. on/off state), a person of ordinary skill in the art would have understood that particular construction for selecting appropriate filter as disclosed by Cheah would have yield the same desire as that in the claim. That is, once one filter is selected, it is on and the others are off.

**Re. Claim 25**, the claimed subject matter “wherein the band comprises a frequency at which interference is expected” would have been understood by one skilled in the art because the purpose for using the filter (col. 6, lines 26-43).

**Re. Claim 26**, similar analogy with that in claim 24, one skilled in the art would have easily realized the claimed subject matter “controlling the on/off states of the at least one communication modules setting the on or off state according to the detection result of the signal intensity” through the signal detection of Cheah in col. 2, line 48 to col. 3, line 32; col. 9, lines 19-24.

**Re. Claim 30**, see claim 24 above.

**Re. Claims 31, 32** see claims 25, 26 and further, it would have been obvious to one skilled in the art as application specific.

**Re. Claims 1, 2**, see claims 26, 25.

**Re. Claims 3, 5-7**, these claimed subject matter would also have been obvious to one skilled in the art as application specific.

**Re. Claim 4**, Cheah discloses “an MAC ... UWB receiver” in Fig. 3, element 38.

**Re. Claim 8**, Cheah discloses “a small signal amplifier” in Fig. 3, element 34.

**Re. Claims 15-20**, see claims 1-8, collectively.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Santhoff et al. (US 7,099,368)

Koslar et al. (US 2007,0165740)

Lee et al. (US 2004/0258133)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 571-272-3040. The examiner can normally be reached on 4/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'D. Ha', with a long horizontal line extending from the end of the signature.

Dac V. Ha  
Primary Examiner  
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